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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,811	06/25/2003	Michael R. Hammond	HAM-00001	5511

7590 09/08/2004

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EXAMINER

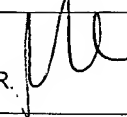
HOANG, TU BA

ART UNIT PAPER NUMBER

3742

DATE MAILED: 09/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/606,811	Applicant(s) HAMMOND, MICHAEL R. 	
	Examiner Tu Ba Hoang	Art Unit 3742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>02/25/04</u> . | 6) <input type="checkbox"/> Other: ____  |

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***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-44 are rejected under 35 U.S.C. 102(b) as being anticipated by Mucha et al (US 4,728,761) cited by the Applicants. Mucha et al shows a system for induction heating a work piece or camshaft C having a first central axis x extending longitudinally therethrough (shown in Figures 2 and 4), the system comprises an induction heating member 210 having an outer surface and an inner surface 232, wherein the inner surface defines a void which includes a second central axis that extends longitudinally therethrough with the central axis of the camshaft C (i.e., the first axis) is concentric to the axis of the void (i.e., the second axis) as shown in Figures 5-6, 7B, a fixturing member 130 having a third central axis extending longitudinal therethrough and selectively operable to fix the camshaft C thereon, wherein the fixturing member 130 is operable to be at least partially received within the void as shown in Figure 7A, wherein the central axis of the fixturing member (i.e., the third axis) also is eccentric to the first and second axes, a rotation member or motor M2 for rotating the fixturing member 130 as shown in Figure 1, and a quenching system 300 as shown in Figures 7E-D and H. It is noted that since the work piece C is a camshaft, it inherently includes an irregularly shaped outer surface including a first portion (i.e., a heel portion) and a spaced and opposed second portion (i.e., a lobe portion) 20 with the first and second portions 20 are substantially equidistant from the inner surface of the induction member 210, and wherein the outer surface of the camshaft C is operable to be substantially evenly heated by the induction heating member 210.

Claims 1-6, 10-13, 17-23, 27-37, and 41-44 are rejected under 35 U.S.C. 102(b) as being anticipated by Gillock (US 3,737,613) cited by the Applicants. Gillock shows a system A for induction heating a work piece or axle shaft B having a first central axis m extending longitudinally therethrough (shown in Figure 1), the system comprises an induction heating member 20 having an outer surface and an inner surface with the inner surface defines a void (shown in Figures 2-4) which includes a second central axis that extends longitudinally therethrough with the central axis of the axle shaft B is also concentric to the axis of the void (i.e., the second axis) as shown in Figure 4, a fixturing member 10,12 (shown in Figure 1) having a third central axis extending longitudinal therethrough and selectively operable to fix the shaft B thereon, wherein the fixturing member 130 is operable to be at least partially received within the void and wherein the central axis of the fixturing member (i.e., the third axis) also is eccentric to the first and second axes, a rotation member (i.e., means for rotating, column 2, lines 42-43) for rotating the fixturing member and the shaft (as shown in Figure 3). It is noted that since the work piece B is an axle shaft which includes an irregularly shaped outer surface including a first portion 14 and a spaced and opposed second portion 16 with the first


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and second portions are substantially equidistant from the inner surface of the induction member, and wherein the outer surface of the axle shaft B is operable to be substantially evenly heated by the induction heating member 20.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tu Ba Hoang whose telephone number is (703) 308-3303. The examiner can normally be reached on Mon-Fri from 8:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tu Ba Hoang  
Primary Examiner  
Art Unit 3742

September 01, 2004